

**Notice of Allowability**

Application No.

10/647,120

Examiner

James J. Leybourne

Applicant(s)

SCHUURMANS ET AL.

Art Unit

2881

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amenaddment received 10 Sewptember 2004.
2. ☒ The allowed claim(s) is/are 1-16.
3. ☒ The drawings filed on 25 August 2003 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some\* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- \* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date 2/14/05
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

### **DETAILED ACTION**

1. According to the "Amendment" received 10 September 2004, the specification has been amended; claims 1, 2, 9 and 10 have been amended

### ***Response to Arguments***

2. Applicant's Remarks received 10 September 2004 have been fully considered and are persuasive.

### ***Allowable Subject Matter***

3. Claims 1-16 are allowed.
4. The following is an examiner's statement of reasons for allowance:

Regarding independent claim 9, the prior art fails to disclose or make obvious a reflector assembly comprising an inner and outer reflector, each having an inner reflective surface and an outer backing layer wherein the backing layer of the inner reflector is covered with a reflective layer having a reflectivity of between 0.7 and 0.99 for wavelengths between 0.1 and 100  $\mu\text{m}$ .

Regarding independent claim 1, the prior art fails to disclose or make obvious a lithographic projection apparatus comprising a reflector assembly with the limitations of the assembly in claim 9.

Regarding independent claim 2, the prior art fails to disclose or make obvious a lithographic projection apparatus comprising a reflector assembly comprising an inner and outer reflector, each having an inner reflective surface and an outer backing layer wherein the backing layer of the outer reflector has an emissivity of between 0.6 and 0.95 for wavelengths between 0.1 and 100  $\mu\text{m}$ .

Regarding independent claim 10, the prior art fails to disclose or make obvious a reflector assembly comprising an inner and outer reflector, each having an inner reflective surface and an outer backing layer wherein the backing layer of the outer reflector is covered with a reflective layer having an emissivity of between 0.7 and 0.99 for wavelengths between 0.1 and 100  $\mu\text{m}$ .

Claims 5 and 6 are allowed by virtue of their dependency on claim 1.

Claims 3 and 4 are allowed by virtue of their dependency on claim 2.

Claims 7 and 8 are allowed by virtue of their dependency on claims 1 or 2.

Claims 13, 14 and 16 are allowed by virtue of its dependency on claim 9.

Claim 11 is allowed by virtue of their dependency on claim 10.

Claims 12 and 15 are allowed by virtue of their dependency on claim 9 or 10.

5. The main feature that separates the lithographic projection apparatus and reflector assemblies apart from prior art is the use of a reflective coating with specific reflective properties on the backing layer of an inner reflector and the use of a backing with specific emissive properties on the backing layer of an outer reflector.

6. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance"

***Conclusion***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to James J. Leybourne whose telephone number is (571) 272-2478. The examiner can normally be reached on M-F 9:00- 6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R Lee can be reached on (571) 272-2477. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

June 2, 2005

JJL



**NIKITA WELLS  
PRIMARY EXAMINER**

06/07/05